ABSTRACT

EFFECT OF WASTE OF TOFU MEDIA ON THE PRODUCTION OF FIBRINOLYTIC ENZYMES FROM *Neurospora sitophila* FNCC 6101

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Proteolytic enzyme is enzym that has ability to break protein while fibrinolytic enzyme is one of proteolytic enzyme that has ability to degrade fibrin. This enzyme is used as therapy for cardiovascular disease. Fibrinolytic enzyme works by degrading thrombus so that fibrin is not formed in blood vessel.

Fibrinolytic enzyme could be produced from many sources, one of microorganism that produce is *Neurospora sitophila*. This microorganism was known to have activity as fibrinolytic. Fibrinolytic enzyme production from *Neurospora sitophila* was mostly influenced by carbon and nitrogen as nutrition of its growth. The purpose of this research is to produce fibrinolytic enzyme from Neurospora sitophila fungus by using tofu waste waste at pH, temperature, media, and optimum concentration. Tofu waste contained high carbon and nitrogen and could be used as production media of *Neurospora sitophila* to produce fibrinolytic enzyme. Activity of fibrinolytic enzyme produced was determined from fibrinolytic index measured in fibrin plate. This research used three different concentration of tofu waste as growth media to observe which concentration was the most optimum to produce fibrinolytic enzyme.

Keywords: *Fibrinolytic enzyme, Neurospora sitophila, tofu waste, concentration, fibrin plate, production*